UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

SEP 1 6 2015

REPLY TO THE ATTENTION OF:
WW-16J

Tamara Cameron, Chief
Regulatory Branch
U.S. Army Corps of Engineers
180 Fifth Street East, Suite 700
Saint Paul, MN 55101-1678

Subject: U.S. Steel Corporation – Minntac Mine - MVP-2014-01247 – Dark River Seepage Collection Project, St. Louis County, Minnesota

Dear Ms. Cameron:

The U.S. Environmental Protection Agency has reviewed the subject public notice in which the applicant, United States Steel Corporation (USS), proposes a seepage collection return system on the western edge of the existing Minntac Mine tailings basin. The purpose of the project is to collect surface seepage water from the west tailings basin perimeter dike and return it back to the tailings basin to reduce the impact of surface seepage on downstream water quality. This project is part of an effort by USS to address a July 9, 2011 Schedule of Compliance agreement with the Minnesota Pollution Control Agency to resolve outstanding water quality non-compliance at the Minntac tailings basin.

The project was put on public notice May 16, 2014EPA objected to the 2014 proposal because it did not comply with the 404(b)(1) guideline requirements related to the alternatives analysis, determination of wetland impacts, minimization efforts, and compensatory mitigation. The project as proposed in 2014 would impact approximately 25.28 acres of wetland in order to utilize existing ponds, natural and constructed drainage swales, a french drain, interconnecting piping, wetland separation sheet pile walls, and natural drainage to convey surface seepage into four catch basins and pump stations to be pumped back to the tailings basin.

USS made substantial changes to their proposal that required initiation of a new public notice period, which began August 7, 2015. The newly designed project consists of constructing approximately 7,440 linear feet of sheet pile, four pump stations, drainage piping and ditches providing seepage collection over approximately 10,400 linear feet of the perimeter damn toe. The current design has eliminated the use of the french drain and utilizes additional sheet piling along with trenching in order to direct surface seepage flow to low points in the topography to be collected and be pumped back into the tailings basin. USS has estimated that approximately 5.75

acres of wetlands would be impacted by this project; 5.15 acres of wetland would be permanently filled and 0.60 acres of wetland would incur temporary impacts.

While EPA appreciates that the redesigned project would result in reduced wetland impacts compared with the earlier design, we believe the current proposal does not meet the requirements of the Guidelines in regard to the determination of project impacts and compensatory mitigation. We provide recommendations to address these deficiencies and come into compliance with the Guidelines.

Wetland Impacts

EPA believes the proposed wetland impacts have not been appropriately quantified. The application indicates that impacts from the installation of sheet pile to block off existing surface seeps, specifically in catchment 1, near Seep C[1], will be temporary as "[w]herever possible, fill material will be removed after completion of sheet pile installation". EPA contends that while the discharge of fill associated with the installation of the sheet pile would be temporary (i.e. removed), the sheet piling themselves constitute "fill" and the installation of the sheet piling is "the discharge of fill" as defined in 40 CFR § 232.2. The definition of *discharge of fill material* in the statute supports this claim:

> "(1) The term *discharge of fill material* means the addition of fill material into waters of the United States. The term generally includes, without limitation, the following activities: Placement of fill that is necessary for the construction of any structure or infrastructure in a water of the United States the building of any structure, infrastructure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, or other uses; causeways or road fills; dams and dikes; artificial islands; property protection and/or reclamation devices such as riprap, groins, seawalls, breakwaters, and revetments; beach nourishment; levees; fill for structures such as sewage treatment facilities, intake and outfall pipes associated with power plants and subaqueous utility lines; placement of fill material for construction or maintenance of any liner, berm, or other infrastructure associated with solid waste landfills; placement of overburden, slurry, or tailings or similar mining-related materials;" after the words "utility lines; and artificial reefs."
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> "(2) In addition, placement of pilings in waters of the United States constitutes a discharge of fill material and requires a Section 404 permit when such placement has or would have the effect of a discharge of fill material. Examples of such activities that have the effect of a discharge of fill material include, but are not limited to, the following: Projects where the pilings are so closely spaced that sedimentation rates would be increased; projects in which the pilings themselves effectively would replace the bottom of a waterbody; projects involving the placement of pilings that would reduce the reach or impair the flow or circulation of waters of the United States; and projects involving the placement of pilings which would result in the adverse alteration or elimination of aquatic functions."

EPA recommends the wetland impacts for this project include the areas impacted by the permanent placement of sheet piling in waters of the U.S. The sheet piles are critical components of the proposed seepage collection system and would have the effect of discharge of fill material and, as such, would affect the amount of mitigation required for this project.

[1] 230 linear feet of sheet piling in Wetland W35B and a portion of 1,230 linear feet of sheet pile in wetland W34B

Mitigation

USS has not demonstrated that it has conducted a thorough, watershed-based alternatives analysis for locating compensatory mitigation within the bank service area (BSA). USS proposes to provide mitigation for impacts to approximately 5.15 acres of wetlands (shallow marsh - 1.79 acres, deep marsh - 0.3 acres, shallow open water - 0.03 acres, alder thicket - 0.6 acres, and coniferous swamp - 2.43 acres) by purchasing 7.73 credits acres of sedge meadow wetland credits at a ratio of 1.5:1 at USS's Palisades III wetland bank, Aitkin County, Minnesota, Bank Service Area (BSA) 5. The proposed compensation at the Palisades III bank is not in-kind or in-place.

In USS's response to comments to the Corps dated October 16, 2014 regarding the summary of efforts made by USS to locate potential compensation sites, USS indicated that it searched for available bank credits on the State's (Minnesota Board of Water and Soil Resources) Bank Credit Database. This search revealed a total of 4.554 USACE-approved bank credits within BSA 2. A more recent search of the database by EPA (September 2, 2015) revealed approximately 15.3689 USACE-approved bank credits within BSA 2; including in-kind wetland credits. EPA recommends USS demonstrate that there are no practicable mitigation options within the watershed of impact, as required by the Guidelines[2], before it is allowed to use credits at the Palisades III mitigation bank.

The analysis of seepage water quality from the west side of the tailings basin indicated elevated levels of certain constituents (e.g. hardness, total dissolved solids, specific conductance, alkalinity and sulfate) which may not be in compliance with existing Minnesota surface water quality standards. The seepage and collection system is an attempt to reduce the impact of this surface seepage on downstream water quality. The wetlands and open water complexes within the project footprint act as both conduits and storage basins for mine tailings seep water. Therefore, the wetlands within the system will be subjected to increased concentrations of these constituents, thus resulting in lower quality wetlands with diminished functional capabilities. Further, the design is proposed to "isolate" and "block" portions of existing wetland, seeps, and open water from downstream wetlands in order to collect (i.e. impound) water and pump it into the tailings basin. The sheet piling proposed for Seep C and Seep J, in particular, may sever the upstream watershed from downstream wetlands. EPA recommends additional mitigation (i.e. higher ratios) be required to address the effect the project discharges will have on water circulation, fluctuation and water chemistry (40 CFR § 230.11(b)) as well as the discharges' secondary effects on the aquatic ecosystem (40 CFR § 230.11(h)).

While wetland impacts from fill have been reduced from the 2014 project design, there is still some concern that wetlands within the project footprint and adjacent wetlands may be subjected to substantial changes in hydrology and loss of wetland function. The rationale provided by USS to support the current design is that it is based on design methods used on the east side of the tailings basin, resulting in no impact to wetlands outside the project footprint. However, limited information was provided on the effectiveness of the east side seepage collection and return system as it relates to wetland hydrology and impacts to wetland function within the west side project footprint. EPA recommends that a comprehensive monitoring plan be required to

[2] 40 CFR § 230

evaluate wetland hydrology and wetland function for wetlands within and adjacent to the seepage collection system. Permanent changes to hydrology from baseline conditions due to secondary impacts may require additional mitigation post construction.

Summary

EPA recognizes the efforts USS has undertaken to avoid and minimize impacts; however, EPA objects to the project as currently proposed because it does not comply with the Guidelines; specifically, the determination of wetland impacts and compensatory mitigation requirements. We offer recommendations that, if implemented, would address our concerns. Please notify us of any response to these comments or any additional information submitted to support the permit application. We appreciate the opportunity to provide comments on this Public Notice. Please contact Kerryann Weaver (312-353-9483) if you have questions.

Sincerely,

Peter Swenson, Chief
Watersheds and Wetlands Branch

Enclosure

cc: Tom Hingsberger, Army Corps of Engineers (via email)
Jim Brist, Minnesota Pollution Control Agency (via email)
Colleen Allen, Minnesota Department of Natural Resources (via email)